U

USSR/General Problems of Pathology - Tumors. Experimental Therapy.

Abs Jour : Ref Zhur Biol., No 5, 1959, 22806

Author : Gluzman, F.A.
Inst : -
Title : The Influence of Various Methods of Hypothermia on the Development of Experimental New Formation.

Orig Pub : Vrachebn. delo, 1957, No 12, 1341-1342

Abstract : The experiments were conducted on the rabbit carcinoma of Brown-Pierce, rats' tumors and induced carcinoma of mice, induced by 9, 10-dimethyl-1,2-benzanthracene. It was noted that in hypothermia by means of ether and ice, the growth of transplanted tumors and induced carcinoma of the skin is retarded and metastasing decreases. In early removal of the tumor the degree of development of recurrences is smaller. In hypothermia according to the method of Dzhiayya (carbon dioxide and cold), during the

Card 1/2

GLUZMAN, F.A. [Hluzman, F.A.], dots.

Hibernation therapy in the case of premature infants; a survey of the literature. Ped., akush. i gin. 19 no.3:60-61 '57. (MIRA 13:1)

1. Kafedra patologicheskoy fiziologii (zav. - deystvitel'nyy chlen AMN USSR prof. M.M. Sirotinin) Kiyevskogo ordena Trudovogo Krasnogo Znameni meditsinskogo instituta im. akad. A.A. Bogomol'tsa (direktor - dots. I.P. Alekseyenko).
(INFANT (PREMATURE)--CARE AND HYGIENE) (HIBERNATION, ARTIFICIAL)

GLUZMAN, F.A., dotsent, red.; LIKHTENSHTEYN, Ye.I., red.; [illegible]ITSHTEYN, A.D., tekhred.

[Physiology and pathology of the cardiovascular system in clinical treatment and experiment; a collection of papers] Fiziologiia i patologiia serdechno-sosudistoi sistemy v klinike i eksperimente; sbornik trudov. Kiev, Gos.med. izd-vo USSR, 1958. 444 p. (MIRA 12:6)

1. Kiyev. Meditsinskiy institut.
(CARDIOVASCULAR SYSTEM--DISEASES)

GLUZMAN, F. A., Doc Med Sci (diss) -- "Problems of the reactivity of the organism in malignant growth". Kiev, 1959. 30 pp (Kiev Order of Labor Red Banner Med Inst im Acad A. A. Bogomolets), 250 copies (KL, No 22, 1959, 120)

GLUZMAN, F.A., dotsent

Hypophysis-adrenal cortex system and malignant growth. Vrach. delo no.2:165-167 F '59. (MIRA 12:6)

1. Kafedra patologicheskoy fiziologii (zav. - deystv.chlen AMN SSSR, prof.N.N.Sirotinin) Kiyevskogo meditsinskogo instituta.
(PITUITARY BODY) (ADRENAL CORTEX) (CANCER)

PEYSAKHOVICH, Iosif Mironovich, prof.; KOL'NER, Rakhil' Yul'yevna; KORENEVSKIY, Leonid Ivanovich; LEVCHUK, Georgiy Antonovich; MAZURENKO, Nikolay Petrovich; POLONSKIY, Boris Leonidovich; SAVITSKIY, Vasiliy Nikolayevich; TELENGATOR, Yakov Moisyevich; UMANSKIY, Yulian Aleksandrovich; GLUZMAN, F.A., red.; RAYZ, A.L., tekhn. red.

[Drug therapy for malignant tumors] Khimioterapiia zlokachestvennykh opukholei. Kiev, Gos. med. izd-vo USSR, 1961. 304 p. (MIRA 14:11)

(CANCER)

GLUZMAN, F.A. [Hluzman, F.A.]

Effect of cortisone on connective tissues in case of malignant growths. Fiziol. zhur. [Ukr.] 7 no.6:824-829 N-D '61. (MIRA 15:3)

1. Kafedra patologicheskoy fiziologii Kiyevskogo meditsinskogo instituta im. akad. A.A. Bogomol'tsa.
(CORTISONE)
(CONNECTIVE TISSUES)
(CANCER)

FEDOROV, Ivan Ignat'yevich, prof.; SIROTIN, N.N., prof., retsenzent; GLUZMAN, F.A., red.; GITSHTEYN, A.D., tekhn. red.; CHUCHUPAK, V.D., tekhn. red.

[Principles of pathological physiology] Osnovy patologicheskoi fiziologii. Kiev, Gosmedizdat, USSR, 1962. 385 p.
(MIRA 15:6)

1. Akademiya meditsinskikh nauk USSR (for Sirotin).
(PHYSIOLOGY, PATHOLOGICAL)

KAVETSKIY, Rostislav Yevgen'yevich[Kavetskyi, R.E.]; GLUZMAN, F.A., red.; RAYZ, A.L., tekhn. red.

[Tumor and the body]Opukhol' i organizm. Kiev, Gosmedizdat USSR, 1962. 298 p. (MIRA 15:9)
(ONCOLOGY)

PLOTICHER, Sarra Moiseyevna; GLUZMAN, F.A., red.; CHUCHUPAK, V.D., tekhn. red.

[Diagnostic laboratory studies] Laboratornye diagnosticheskie issledovaniia. Kiev, Gosmedizdat USSR, 1962. 520 p. (MIRA 16:12)

(DIAGNOSIS)

GLUZMAN, G.

This is real news! Mest.prom.i khud. promys. 3 no.1:10 Ja '63.
(MIRA 16:2)

1. Starshiy inzhener Kiyevskogo proyektno-konstruktorskogo byuro gorodskogo upravleniya bytovogo obsluzhivaniya.
(Kiev—Service industries)

GLUZMAN, G.L., kand. tekhn. nauk.

Length of service of moving parts of the 37D engine between repairs. Energomashinostroenie 3 no.10:26-29 O '57. (MIRA 10:12)
(Diesel engines)

GLUZMAN, G.L., kand. tekhn. nauk

Selecting the finish for the principal wearing parts of diesels. Energomashinostroenie 4 no. 6:42-44 Je '58. (MIRA 11:8)
(Diesel engines)

GLUZMAN, G.L., kand.tekhn.nauk

Microstructural changes in the surface layers of materials subject to friction in the main parts of diesel engines. Energomashinostroenie 7 no.5:34-35 My '61. (MIRA 14:8)
(Diesel engines)
(Metallography)

S/114/62/000/012/002/007
E194/E135

AUTHORS: Gluzman, G.L., Candidate of Technical Sciences, and Purgin, B.A., Engineer

TITLE: Assessing the reliability of power sets

PERIODICAL: Energomashinostroyeniye, no.12, 1962, 17-20

TEXT: As power plant becomes more complicated and more highly stressed a need is felt for quantitative assessment of reliability by means of the theory of probability. The following criteria are studied:
1) "the mean time of continuous operation":

$$T_{av} = \frac{\sum_{i=1}^{N} t_i}{N} \qquad (1)$$

where t_i is the operating time of one particular item; N is the number of items of the particular type. This is a simple and revealing index which in effect compares the performance with that of similar plant. Its main disadvantage is that being a

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correctly at the start and end of the time interval. This is a convenient characteristic of reliability for power equipment as it demonstrates changes of reliability with time and is easily determined experimentally. It can also be used to determine other criteria of reliability including the mean duration of repair work and the ratio of standstill time to running time. Worked examples are given of the use of these criteria in studying the performance of a diesel engine. There is a particular need for extensive service performance data, but once this is available it becomes possible to set up specific requirements in respect of the reliability of power equipment expressed in numerical terms. There are 2 figures and 1 table.

Card 3/3

GLUZMAN, G.L., kand. tekhn. nauk; BUKIN, P. Ye., inzh.-kapitan 2-go ranga, kand. tekhn. nauk

Evaluation of the serviceability of power units of surface ships. Mor. sbor. 49 no. 12:68-71 D '65 (MIRA 19:1)

L 29720-66 EWT(1) TG

ACC NR: AP6015406 SOURCE CODE: UR/0375/65/000/012/0068/0071

AUTHOR: Gluzman, G. L. (Candidate of technical sciences); Bukin, P. Ye. (Candidate of technical sciences; Engineer; Commander) 40 B

ORG: none

TITLE: Evaluating the operational reliability 25 of power stations on surface craft

SOURCE: Morskoy sbornik, no. 12, 1965, 68-71

TOPIC TAGS: statistic analysis, power plant, reliability theory, marine engineering

ABSTRACT: The methods of statistical analysis are used for determining the operational reliability of shipboard power stations. The probability of dependable operation of the individual mechanisms is taken as the principal criterion for reliability. This criterion should be given by designers and implemented by industry. Reliability of the power installations is evaluated from the probability for maintaining 100% power as well as at least 75%, 50% and 25% of the rated power and finally the probability for total power loss. These criteria may be used for determining the reliability of the power stations in normal operating conditions as well as in emergency situations. An example is given showing evaluation of the reliability of a turbine boiler installation. Graphs are given which may be used to determine the probability of dependable operation of a power installation when the reliability of the individual units in the

Card 1/2

L 29720-66

ACC NR: AP6015406

installation decreases due to wear after protracted use. It is shown that the reliability of dependable operation depends on the working conditions of the installation. Therefore, these conditions should be strictly defined before a ship leaves port. Formulas are given which may be used to account for the skill of servicing personnel as well as for the average repair time and breakdown frequency. Orig. art. has: 2 figures, 7 formulas.

DATE SUBM: none

SUB CODE: 14/ 1 ORIG REF: 006

Card 2/2

KOL'TSOV, V. N., [redacted]

Hides and Skins

Fermentative and thermal control in living hides. Leg. prom., No. 1, 1952.

9. Monthly List of Russian Accessions, Library of Congress, March 1958, Uncl.

GLUZMAN, G.M., inzhener.

Drying leather glued on glass. Leg.prom.15 no.1:40-42 Ja '55.
(Dyes and dyeing—Leather) (MLRA 8:3)

ZAYONCHKOVSKIY, A.D.; YABKO, Ya.M.; MIKHAYLOV, N.A.; FEOKTISTOV, V.K.; SHMERLING, B.M.; BERNSHTEYN, M.Kh.; GUS'KOV, F.G.; PARAMONOV, V.G.; GLUZMAN, G.M.; GRIGORIADI, M.T.

Polyamide treatment of imitation kidskin and flesh layer splits. Leg.prom. 16 no.10:22-26 O '56. (MIRA 10:12)
(Hides and skins) (Amides)

GLUZMAN, G. M.

Chrome leather. G. M. Gluzman, M. G. [illegible], V. K. Safonova, N. S. [illegible], and N. N. [illegible]. U.S.S.R. 106,153, June 25, 1957. The tanning of chrome leather, such as calfskin, tanned calf leather, and half-skin is carried out in 2 stages, the 1st lasting half the time of the 2nd. The paring is done before the 2nd stage of tanning. The drying is done at 35-40°, and the stretching at a moisture content of 20-25%. For drying, the skins are glued to sheets with an adhesive of sulfonated fish oil and starch or a decoction of flaxseed and casein, to which is added a synthetic resin, e.g., polyvinyl acetate or an acrylic resin. [illegible]

G.U.MAN, G.M.; GRIGORIADI, N.G.

Effect of syntan treatment on drying and finishing glued chrome leather. Leg.prom. 17 no.6:26-27 Je '57. (MLRA 10:8)
(Tanning materials) (Leather)

GLUZMAN, G.M.

KOP'YEV, A.I. [deceased]; ZAYONCHKOVSKIY, A.D.; YABKO, Yu.M.; PARINI, V.P.; PARAMONOV, V.G.; GLUZMAN, G.M.; GRIGORIADI, M.G.

Increasing water repellency in leather by means of a velan-type compound. Leg.prom. 17 no.7:23-25 Jl '57. (MLRA 10:9)
(Leather industry)

GLUZMAN, G.M., inzh.

Effect of the surface of various materials and of the method of gluing in drying on the quality of chrome leather. Kozh.-obuv. prom. 4 no.7:24-26 Jl '62. (MIRA 17:1)

GLUZMAN, G.M.

Use of various adhesives for chrome leather drying by adhesion. Kozh.-obuv.prom. 4 no.9:27-29 S '62. (MIRA 15:9)
(Leather—Drying)
(Adhesives)

GLUZMAN, I.A., inzh.

About performance of the soot-blowing devices of the "Ilmarine" Works. Teploenergetika 4 no.12:91-92 D '57. (MLRA 10:11)
(Boilers)

L 04251-67 EWT(d), EWT(m)/EWP(t)/T DJ

ACC NR: AP6005389 (N) SOURCE CODE: UR/0413/66/000/001/0140/0140

23
22
B

AUTHORS: Kreysler, A. A.; Gorodetskiy, K. I.; Gluzman, I. A.

ORG: none

TITLE: An axial piston pump. Class 59, No. 177774

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 1, 1966, 140

TOPIC TAGS: axial pump, fluid pump

ABSTRACT: This Author Certificate presents an axial piston pump with a support on the intake and with a rotating cylinder block. The pump includes connecting rods with double-sided joints. One of the joints is connected with the piston and the other with the socket (see Fig. 1). The socket is mounted on one of the axial holes of the drive shaft flange and transmits the pressure force of the liquid being pumped through the hydrostatic bearing to the pump casing. The design reduces the leakage and increases the pump efficiency. The axial holes in the drive shaft flange run clear through, and each socket mounted in the hole contacts its flat face directly with the casing or is connected with a fixed part of the casing. Each socket has a recess in its flat face and is connected by axial channels to the connecting rod and the piston and to the proper operating chamber. This arrangement provides the

Card 1/2 UDC: 621.659

ACC NR: AP6005389

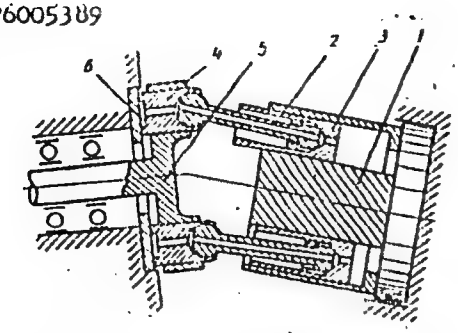


Fig. 1. 1 - cylinder block; 2 - connecting rods; 3 - pistons; 4 - socket; 5 - drive shaft; 6 - recess in the socket

individual hydrostatic bearing of each piston and the correspondence between the back pressure in the bearing and the pressure in the operating chamber. Orig. art. has: 1 figure.

SUB CODE: 13/ SUBM DATE: 02Jun62

Card 2/2 Ev

GLUZMAN, I.I. (Vinnitsa)

Selection of numerical data for composing problems solvable according to the Pythagorean theorem. Mat. v shkole no. 3:62 My-Je '61. (MIRA 14:5)

(Pythagorean proposition)

GLUZMAN, I.S., kandidat tekhnicheskikh nauk, redaktor; KALININ, V.K., inzhener, redaktor; KHITROV, P.A., tekhnicheskiy redaktor

[Signaling, central control and block systems of foreign railroads; a collection of articles] Ustroistva STsB zarubezhnykh zheleznykh dorog; sbornik statei. Moskva, Gos. transp. zhel-dor. izd-vo, 1956. 131 p. (MLRA 9:10)

(Railroads--Signaling)

GLUZMAN, I.S., kandidat tekhnicheskikh nauk.

Rail circuits with electron tubes used by French railroads. Zhel. dor.transp. 37 no.7:88-89 Jl '56. (MLRA 9:8)
(France--Electric locomotives)

GLUZMAN, I.S., kand.tekhn.nauk, red.; CHERKMENEV, N.M., inzh., red.; BOBROVA, Ye.N., tekhn.red.

[New methods in signal, central control, and blocking systems for railroads in other countries; a collection of articles] Novaia tekhnika STsB na zarubezhnykh zheleznykh dorogakh; sbornik statei. Moskva, Gos. transp.zhel-dor. izd-vo, 1957. 129 p. (MIRA 11:5) (Railroads)

GLUZMAN, I.S.; KARNYUSHIN, L.V., dotsent.

System of pneumatic transportation of steel specimens in metallurgical plants. Zav. lab. 23 no.4:502-503 '57. (MLRA 10:6)

1. Master Beresnyakovskogo montazhnogo upravleniya tresta "Uralelektromontazh" (for Gluzman). 2. Zaveduyushchiy kafedroy elektrifikatsii promyshlennykh predpiyatiy L'vovskogo politekhnicheskogo instituta (for Karnyushin).
(Pneumatic-tube transportation)

GLUZMAN, Il'ya Samoylovich, kand.tekhn.nauk; MOSHENTSEVA, I.I., red.; [redacted] tekhn.red.

[English-Russian dictionary on railroad signaling and communication] Anglo-russkii slovar' po zheleznodorozhnoi avtomatike, telemekhanike i sviazi. Moskva, Gos. izd-vo fiziko-matem. lit-ry, 1958. 427 p. (MIRA 12:2)
(Railroad engineering--Dictionaries)
(English language--Dictionaries--Russian)
(Railroads--Signaling)

GLUZMAN, I.S., kand.tekhn.nauk

Small control devices for centralized traffic control. Avtom., telem.i sviaz 2 no.4:45-47 Ap '58. (MIRA 12:12)
(Railroads--Signaling--Centralized traffic control)

GLUZMAN, I.S., kand. tekhn. nauk

Electronic track circuits. Avtom. telem. i sviaz' 2 no.12:42-43 D '58. (MIRA 11:12)
(France--Railroads)

GLUZMAN, I.S., kand.tekhn.nauk

Building of signaling systems in the U.S. Avtom., telem.i sviaz 3 no.9:47 S '59. (MIRA 13:2)
(United States--Railroads--Signaling)

GLUZMAN, I.S., kand.tekhn.nauk; MARENKOVA, G.I., inzh., red.;
BOBROVA, Ye.N., tekhn.red.

[New developments in automation and remote control on foreign railroads; translated articles] Novoe v avtomatike i telemekhanike na zarubezhnykh zheleznykh dorogakh; perevod statei. Moskva, Vses.izdatel'sko-poligr.ob"edinenie M-va putei soobshcheniia, 1960. 165 p. (MIRA 13:11)
(Railroads--Electronic equipment) (Automatic control)
(Remote control)

GLUZMAN, I.S.

ALATORTSEV, S.A., prof., doktor tekhn.nauk; ANDREYEV, A.V., kand.tekhn. nauk; ANCHAROV, I.L., inzh.; BALINSKIY, S.I., inzh.; BELOUSOV, V.G., inzh.; VINNITSKIY, K.Ye., kand.tekhn.nauk; VLASOV, V.M., inzh.; VORONTSOV, N.P., kand.tekhn.nauk; GIPSMAN, M.K., inzh.; GLUZMAN, I.S., kand.tekhn.nauk; GUR'YEV, S.V., kand.tekhn.nauk [deceased]; DEMIN, A.M., kand.tekhn.nauk; YEGURNOV, G.P., kand. tekhn.nauk; YEFIMOV, I.P., inzh.; ZHUKOV, L.I., kand.tekhn. nauk; ZEL'TSER, N.M., inzh.; KOSACHEV, M.N., kand.tekhn.nauk; KOTOV, A.F., inzh.; KUDINOV, G.P., inzh.; LAPOVENKO, N.A., kand. tekhn.nauk; MAZUREK, S.F., inzh.; MEL'NIKOV, N.V.; MUDRIK, N.G., inzh.; NIKONOV, G.P., kand.tekhn.nauk; ORLOV, Ye.I., inzh.; POTAPOV, M.G., kand.tekhn.nauk; PRISEDSKIY, G.V., inzh.; RZHEVSKIY, V.V., prof., doktor tekhn.nauk; RYAKHIN, V.A., kand. tekhn.nauk; SIMKIN, B.A., kand.tekhn.nauk; SITNIKOV, I.Ye., inzh.; SOROKIN, V.I., inzh.; STASYUK, V.N., kand.tekhn.nauk; STAKHEVICH, Ye.B., inzh.; SUSHCHENKO, A.A., inzh.; TYUTIN, I.F., inzh.; TYMOVSKIY, L.G., inzh.; FISENKO, G.L., kand.tekhn.nauk; FURMANOV, B.M., inzh.; SHATAYEV, M.G., inzh.; SHESHKO, Ye.F., prof., doktor tekhn.nauk; TERPIGOREV, A.N., glavnyy red. [deceased];

(Continued on next card)

APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R000615510002-1"

ALATORTSEV, S.A.---(continued) Card 2.
KIT, I.K., zamestitel' glavnogo red.; SHESHKO, Ye.F., zamestitel' otv.red.; BUGOSLAVSKIY, Yu.K., red.; BYKHOVSKAYA, S.N., red.; DIONIS'YEV, A.I., kand.tekhn.nauk, red.; KOZIN, Yu.V., red.; SOKOLOVSKIY, M.M., red.; YASTREBOV, A.I., red.; DEMIDYUK, G.P., kand.tekhn.nauk, red.; KRIVSKIY, M.N., kand.tekhn.nauk, red.; LYUBIMOV, B.N., inzh., red.; MOLOKANOV, P.L., inzh., red.; REISH, A.K., inzh., red.; RODIONOV, L.Ye., kand.tekhn.nauk, red.; SLAVUTSKIY, S.O., inzh., red.; TRAKHMAN, A.I., inzh., red.; TRYMOVSKIY, L.G., inzh., red.; FIDELEV, A.S., doktor tekhn.nauk, red.; SHUKHOV, A.N., kand.tekhn.nauk, red.; TER-IZRAEL'YAN, T.G., red. izd-va; PROZOROVSKAYA, V.L., tekhn.red.; KONDRAT'YEVA, M.A., tekhn.red.

(Continued on next card)

ZLATORTSEV, S.A.---(continued) Card 3.
[Mining; an encyclopedic dictionary] Gornoe delo; entsiklopedicheskii spravochnik. Glav.red.A.M.Terpigorev. Chleny glav. red.A.I.Baranov i dr. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po gornomu delu. Vol.10. [Mining coal deposits by the open-cut method] Razrabotka ugol'nykh mestorozhdenii otkrytym sposobom. Redkollegiia toma; N.V.Mel'nikov i dr. 1960. 625 p.
(MIRA 13:2)

1. Chlen-korrespondent AN SSSR (for Mel'nikov).
(Coal mines and mining) (Strip mining)

GUZMAN, I.S., dots., kand.tekhn.nauk

Signaling devices on French railroads. Avtom., telem. i sviaz' 4 no.7:44-48 Jl '60. (MIRA 13:7)
(France--Railroads--Signaling)

LUPAL, Nikolay Vasil'yevich; BOSIN, Matvey Itskovich; PEREBOROV, Aleksandr Sergeyevich; SMIRNOVA, Appolinariya Vasil'yevna; Myler, Aleksandr Aleksandrovich; TSUKANOV, T.T., kand. tekhn.nauk, retsenzent; SHUPLOV, V.I., kand.tekhn.nauk, retsenzent; GLUZMAN, I.S., kand.tekhn.nauk, red.; USENKO, L.A., tekhn.red.

[Theoretical principles of automatic and remote control] Teoreticheskie osnovy avtomatiki i telemekhaniki. By N.V. Lupal i dr. Moskva, Vses.izdatel'sko-poligr.ob"edinenie M-va putei soobshcheniia, 1961. 414 p.
(MIRA 14:12)

(Automatic control) (Remote control)

GLUZMAN, I.S., kand.tekhn.nauk

Session of the signaling section of the American Railway Association. Avtom., telem. i svias' 5 no.5:46-47 My '61. (MIRA 14:6)
(Chicago--Congresses)
(United States--Railroads--Signaling)
(Railroads--Congresses)

KOTLYARENKO, N.V., kand. tekhn. nauk; MANOSHIN, N.K., inzh.;
TSETSURA, I.A., inzh.; LEONOV, A.A., inzh., retsenzent;
GLUZMAN, [illegible], kand. tekhn. nauk, red.; VOROTNIKOVA,
L.F., tekhn. red.

[Track circuits] Rel'sovye tsepi. Moskva, Transzheldorizdat,
1963. 142 p. (MIRA 16:10)
(Railroads--Signaling)(Railroads--Electric equipment)

GLUZMAN, I.S., kand. tekhn. nauk

Automatic car checking on railroads in Great Britain.
Avtom., telem. i sviaz' 7 no.6:46-47 Je '63.
(MIRA 17:3)

GLUZMAN, I.S., kand. tekhn. nauk

Single-track automatic block system with two-line wires. Avtom., telem. i sviaz' 7 no.11:44-47 N '63. (MIRA 16:12)

GLUZMAN, I.S., kand. tekhn. nauk

Crossing signaling system with timed action. Avtom. telem. i sviaz' 8 no. 3:46-48 Mr '64. (MIRA 17:5)

GLUZMAN, I.S., kand. tekhn. nauk

Use of cybernetics in railroad transport. Avtom., telem. i aviaz 8 no.6:17-19 Je '64. (MIRA 17:6)

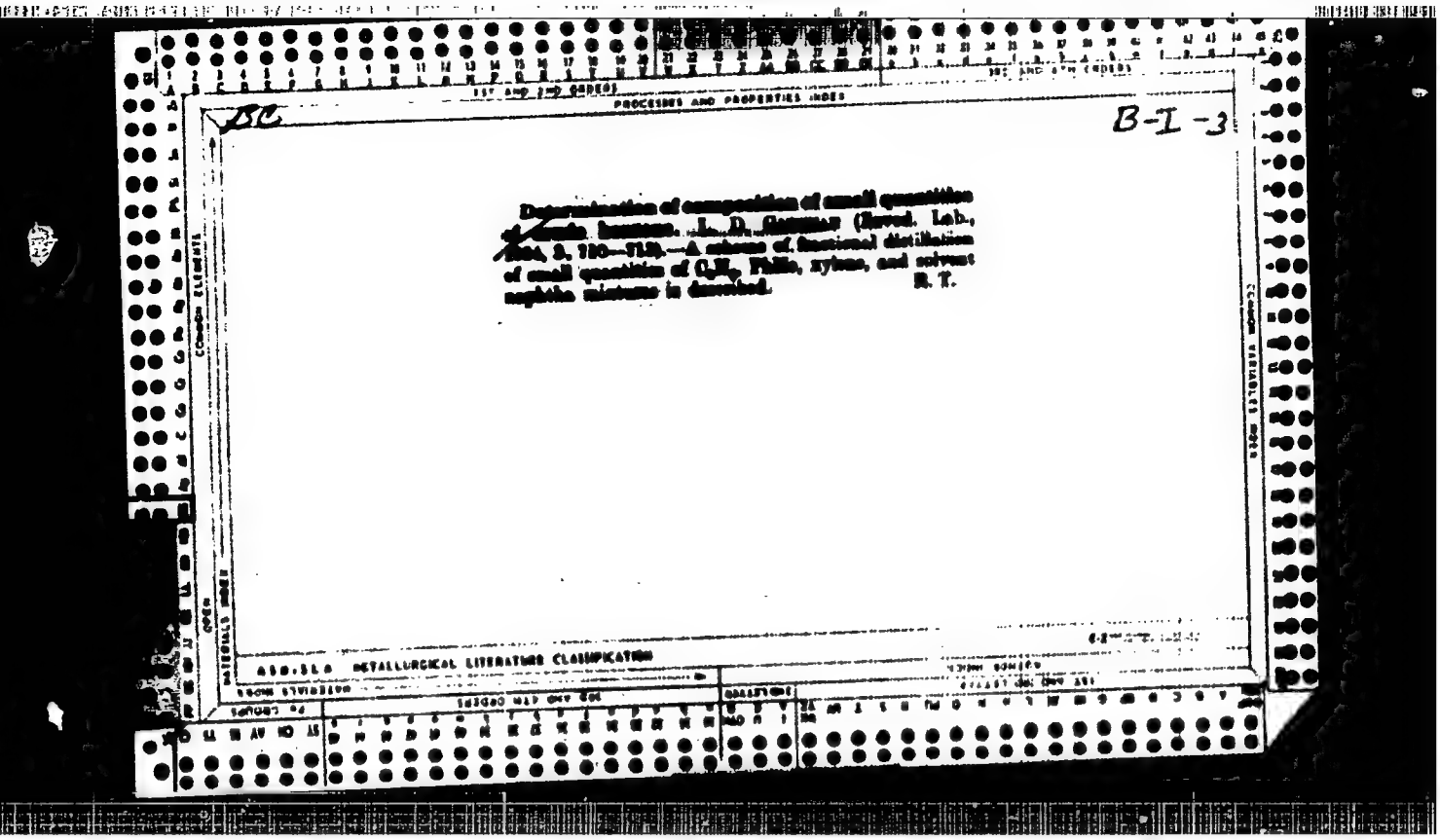
PEREBOROV, Aleksandr Sergeyevich, kand. tekhn. nauk; SEKK, Viktor Nikolayevich, kand. tekhn. nauk; KATNIKOV, Vladimir Dmitriyevich, inzh.; KARVATSKIY, S.B., kand. tekhn. nauk, retsenzent; GLUZMAN, I.S., red.

[Remote control of switches and signals] Teleupravlenie strelkami i signalami. Moskva, Transport, 1965. 383 p. (MIRA 18:8)

GAL'PERIN, Yu.B., podpolkovnik med. sluzhby, GLUZMAN, I.S., mayor med.sluzhby

Case of prolonged retention of a contrast medium in the nasolacrimal canal. Oft.zhur. 13 no.5:306-307 '58 (MIRA 11:10)

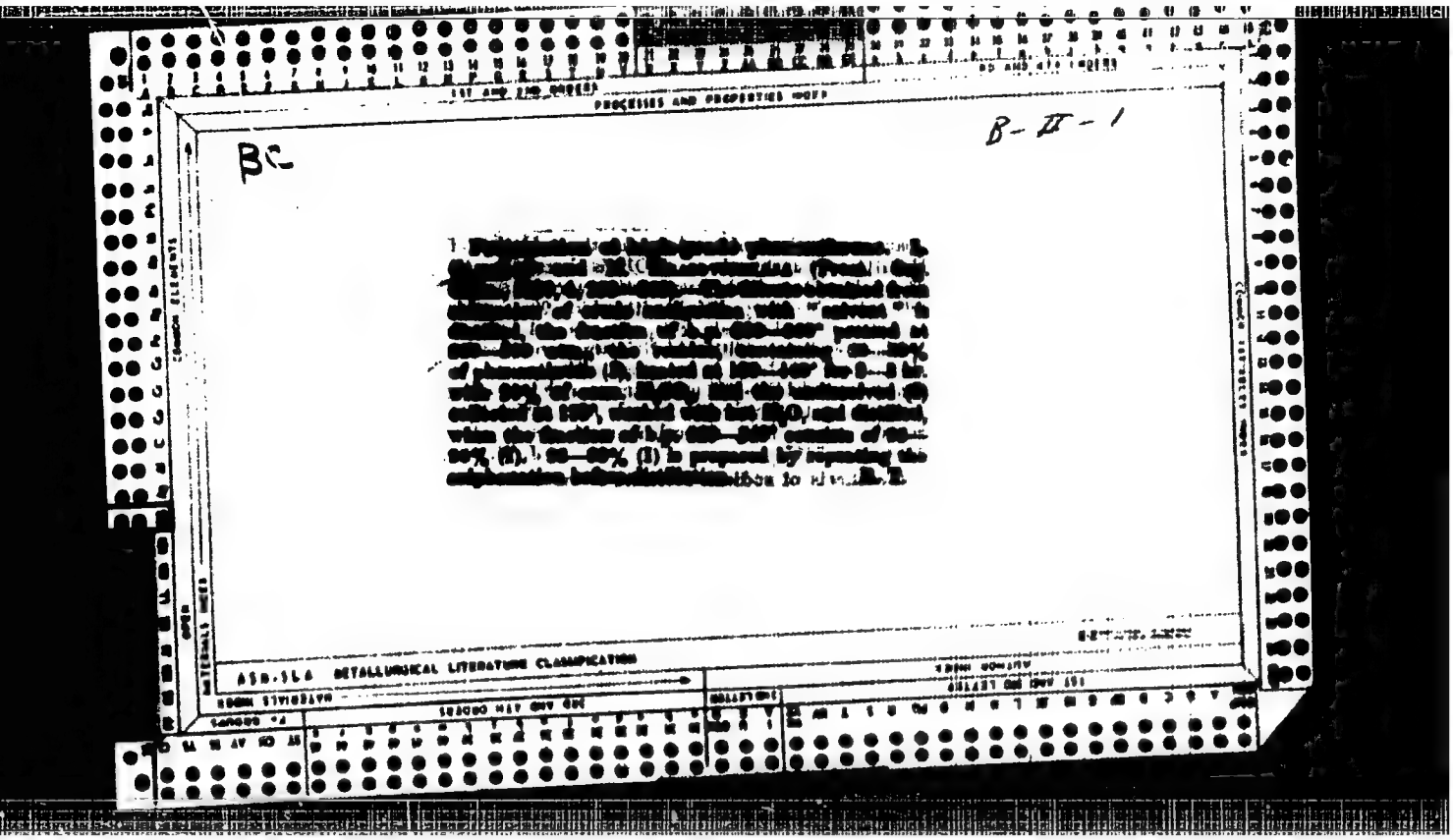
1. Iz Laringo-oto-rino kafedry im. prof. V.I. Voyacheka i kafedry oftal'mologii (nach. - prof. B.L. Polyak) Voyenno-meditsinskoy ordena Lenina akademii im. S.M. Kirova.
(LACRIMAL ORGANS--RADIOGRAPHY)

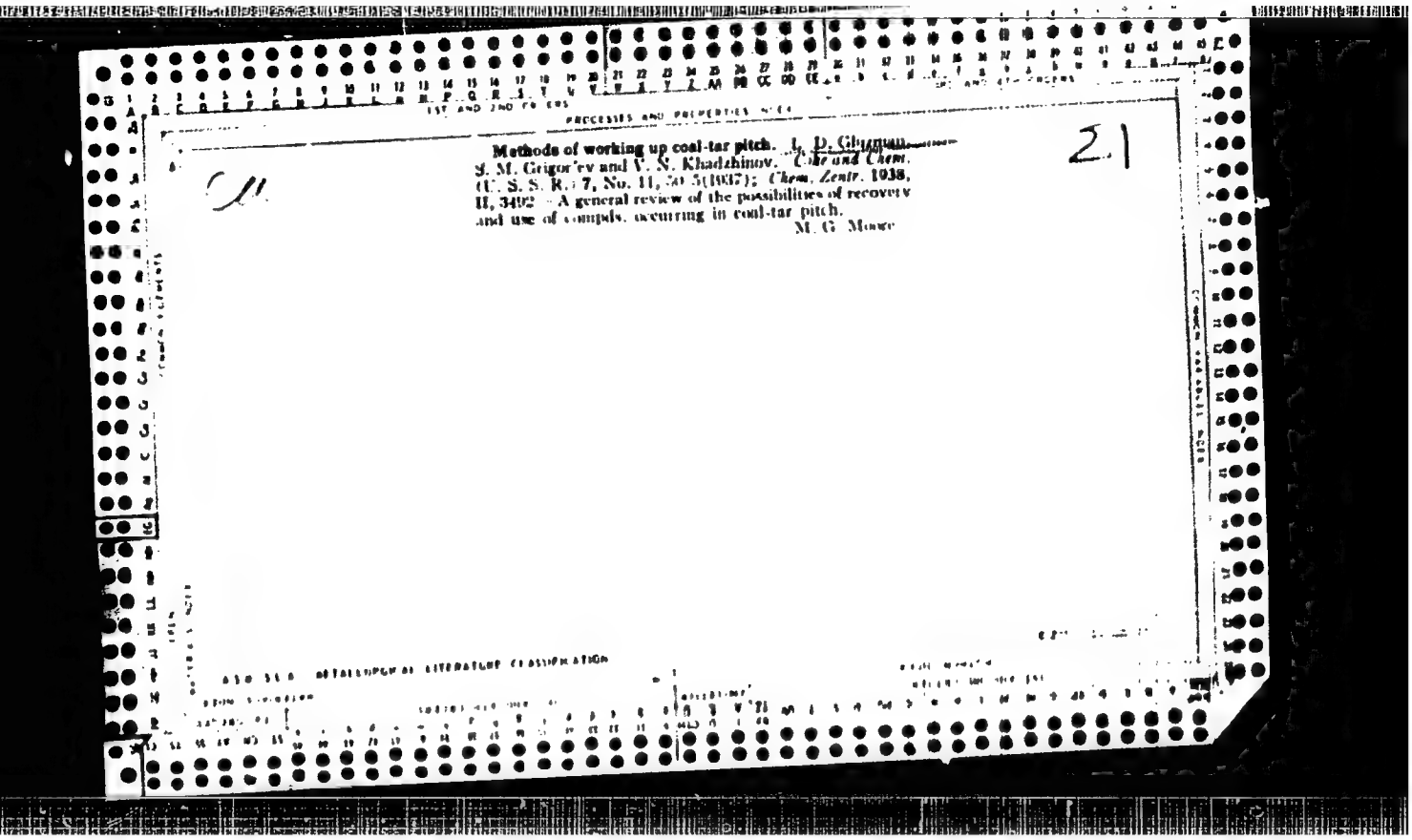


PROCESSES AND PROPERTIES INDEX

Purifying phenanthrene. L. D. Gluzman and M. ... Krasovitskii. Russ. 43,000, June 30, 1935. Crude phenanthrene is heated to 100-30° in the presence of strong H_2SO_4 (not more than 30% of H_2SO_4 on the wt. of phenanthrene).

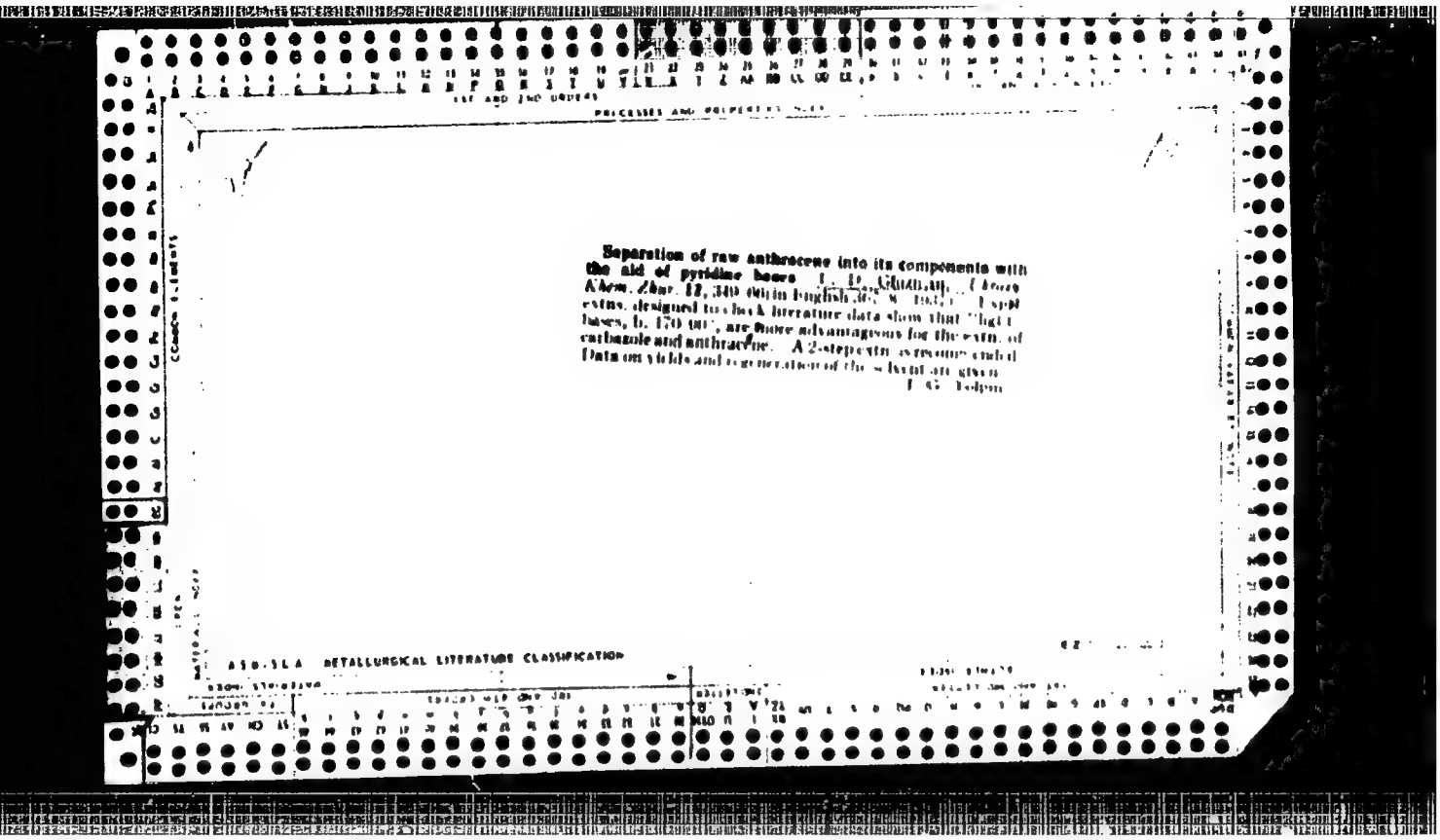
AIB-SLA METALLURGICAL LITERATURE CLASSIFICATION





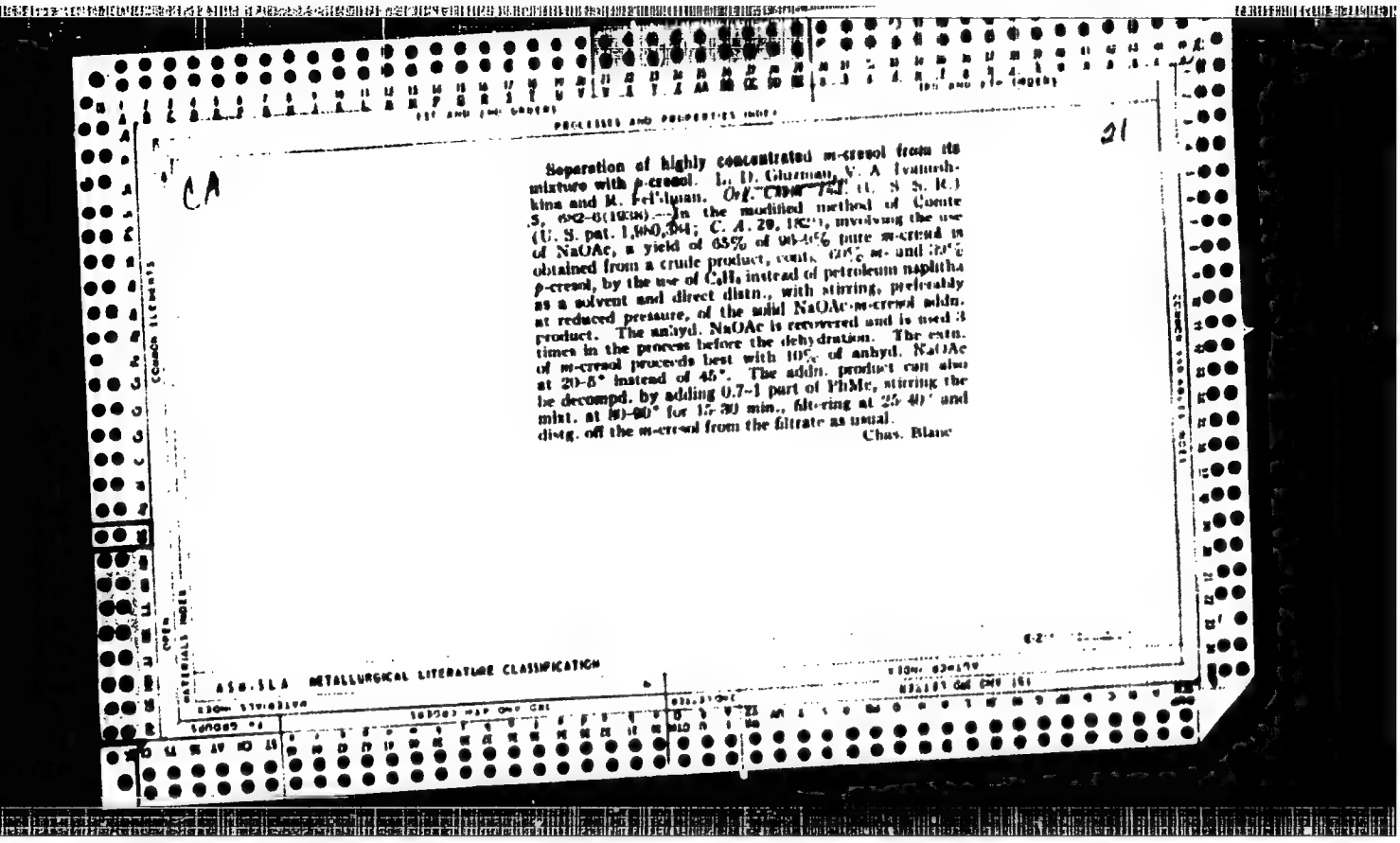
Methods of working up coal-tar pitch. I. D. Glurman, S. M. Grigor'ev and V. S. Khadzhinov. *Coke and Chem.* (U. S. S. R.) 7, No. 11, 30-5(1937); *Chem. Zentr.* 1938, II, 3492.—A general review of the possibilities of recovery and use of compds. occurring in coal-tar pitch.

M. G. Moore



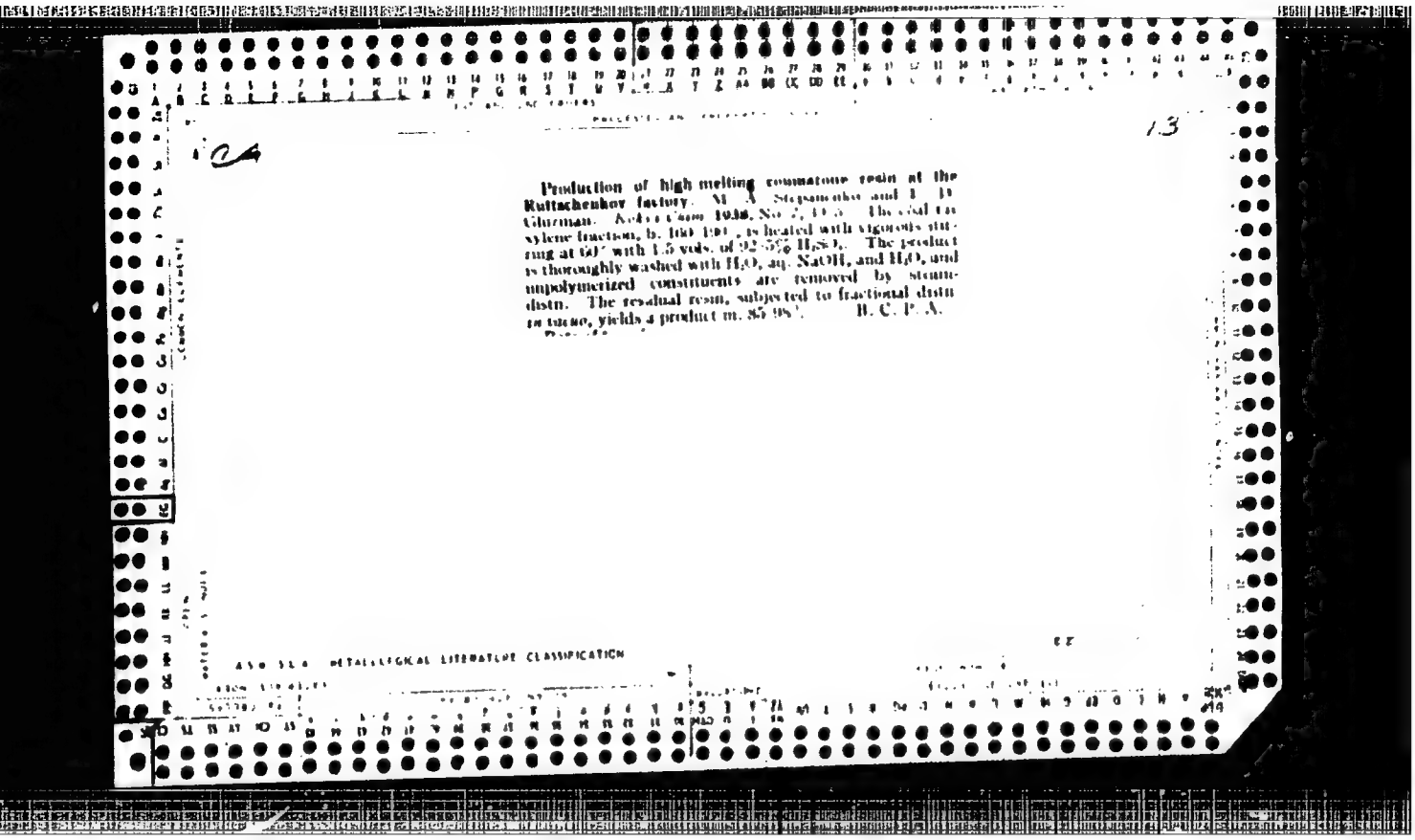
Separation of raw anthracene into its components with the aid of pyridine bases

A50.51A METALLURGICAL LITERATURE CLASSIFICATION

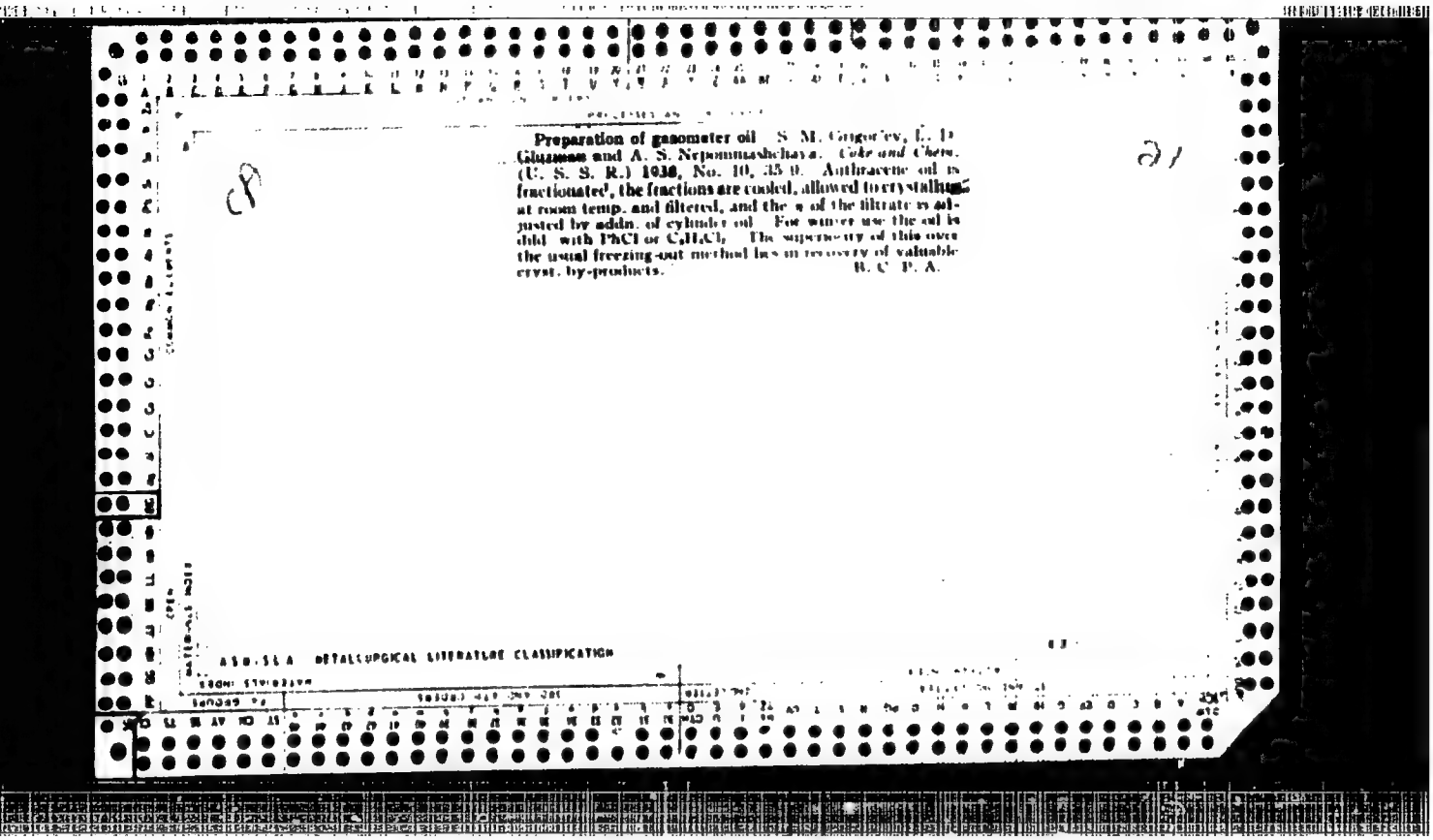


Separation of highly concentrated *m*-cresol from its mixture with *p*-cresol. L. D. Glavman, V. A. Ivanushkina and M. Fel'dman. *Org. Chem. Ind.* (U. S. S. R.) 5, 682–6 (1938).—In the modified method of Conte (U. S. pat. 1,900,344; *C. A.* 20, 1821), involving the use of NaOAc, a yield of 65% of 98–99% pure *m*-cresol is obtained from a crude product, cont. 65% *m*- and 35% *p*-cresol, by the use of CaH_2 instead of petroleum naphtha as a solvent and direct distn., with stirring, preferably at reduced pressure, of the solid NaOAc-*m*-cresol addn. product. The anhyd. NaOAc is recovered and is used 3 times in the process before the dehydration. The extn. of *m*-cresol proceeds best with 10% of anhyd. NaOAc at 20–5° instead of 45°. The addn. product can also be decompd. by adding 0.7–1 part of PhMe, stirring the mixt. at 80–90° for 15–30 min., filtering at 25–40° and distg. off the *m*-cresol from the filtrate as usual.

Chas. Blanc



Production of high melting coumarone resin at the Ruttschenkov factory. M. A. Stepanenko and I. D. Glurman. Koks i Khim 1938, No. 2, 19-23. The crude xylene fraction, b. 130-150°, is heated with vigorous stirring at 60° with 1.5 vols. of 92-5% H_2SO_4. The product is thoroughly washed with H_2O, aq. NaOH, and H_2O, and unpolymerized constituents are removed by steam-distn. The residual resin, subjected to fractional distn in vacuo, yields a product m. 85-95°. B. C. P. A.



Preparation of gasometer oil S. M. Gregor'ev, L. D. Glazunov and A. S. Nejmanmashchaya. *Coke and Chem.* (U. S. S. R.) **1938**, No. 10, 35-9. Anthracene oil is fractionated, the fractions are cooled, allowed to crystallize at room temp. and filtered, and the η of the filtrate is adjusted by addn. of cylinder oil. For winter use the oil is dild. with PhCl or $C_6H_4Cl_2$. The superiority of this over the usual freezing-out method lies in recovery of valuable cryst. by-products. B. C. P. A.

A.S.M.-S.L.A. METALLURGICAL LITERATURE CLASSIFICATION

CU

21

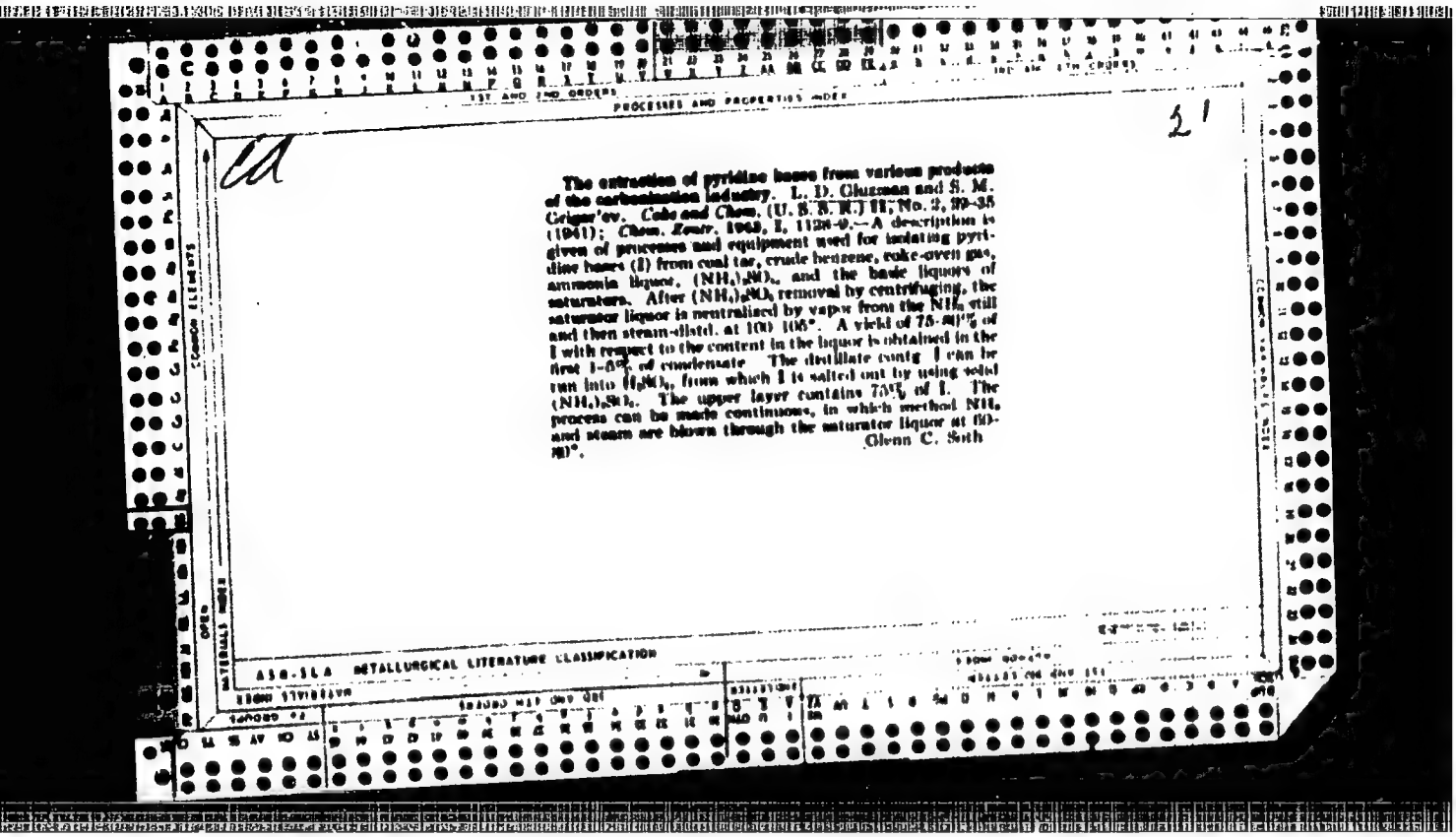
**Production of fluorene, acenaphthene, diphenylene ox-
ide and o-diphenol from coal tar, and their purification**
S. M. Grigor'ev, L. D. Gluzman, V. A. Ivanushkina and
D. I. Rozalavskaya. *Coke and Chem.* (U. S. S. R.) 9, No.
10-11, 54-7(1939); *Chimie & industrie* 44, 41(1940)
By fusing the coal-tar fractions boiling between 278° and
300° with solid KOH pure acenaphthene, fluorene and o-
diphenol can be sepd. The reaction must be carried out
at the b. p. of the fraction treated. On the other hand, by
rectification of the suitable fractions, followed by crystn.
and purification with H_2SO_4, fluorene and diphenylene ox-
ide can be extd. A. Papineau-Couture

METALLURGICAL LITERATURE CLASSIFICATION

21

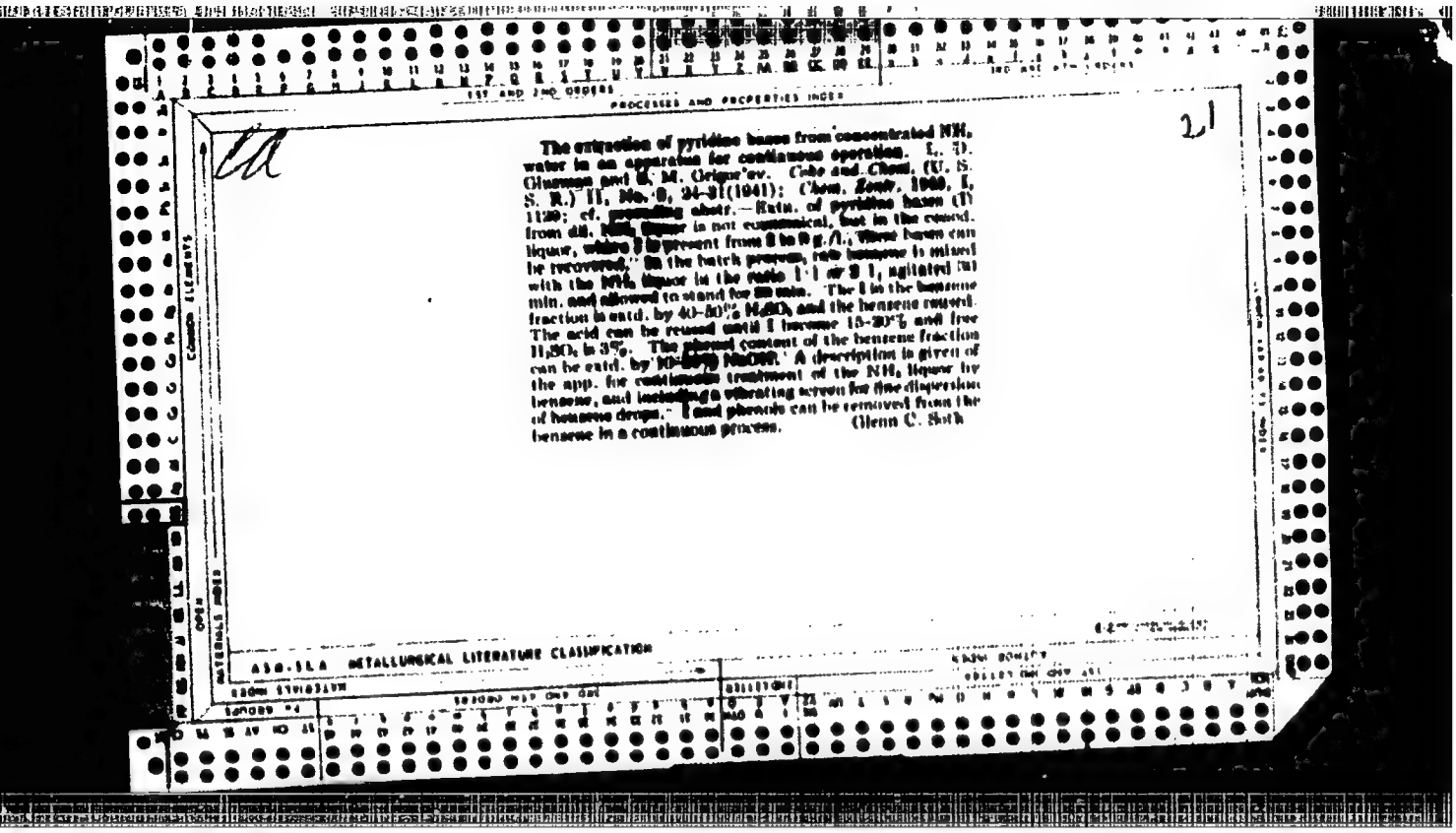
Determination of fluorene alone and in coal-tar fractions. L. D. Gluzman and G. M. Popova. *Trudy Khar'kov. Nauch.-Issledovatel. Uglekhim. Inst.* **1940**, No. 10, 175-87; *Khim. Referat. Zhur.* 4, No. 9, 87(1941).—A no. of methods for detg. fluorene were examd. Nitration to 2-nitrofluorene in AcOH soln. gave the best results. The conditions for nitrating were studied and the yield of the product (m. 152-3°) was increased to 88.5-91.0%. The nitro derivs. of phenanthrene, acenaphthene and diphenylene oxide were sol. more in AcOH under the conditions described than was 2-nitrofluorene. Dissolve 2 g. of sample and 4 g. of fluorene in 30-42 cc. of glacial AcOH, cool, add slowly 6.6 cc. of HNO_3 (d. 1.38-1.40) at 30-40°, increase the temp. slowly to 80-5°, nitrate for 30 min., add 25 cc. of AcOH, cool, filter out the 2-nitrofluorene, wash with 5 cc. of AcOH and dry at 100-20°. W. R. H.

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

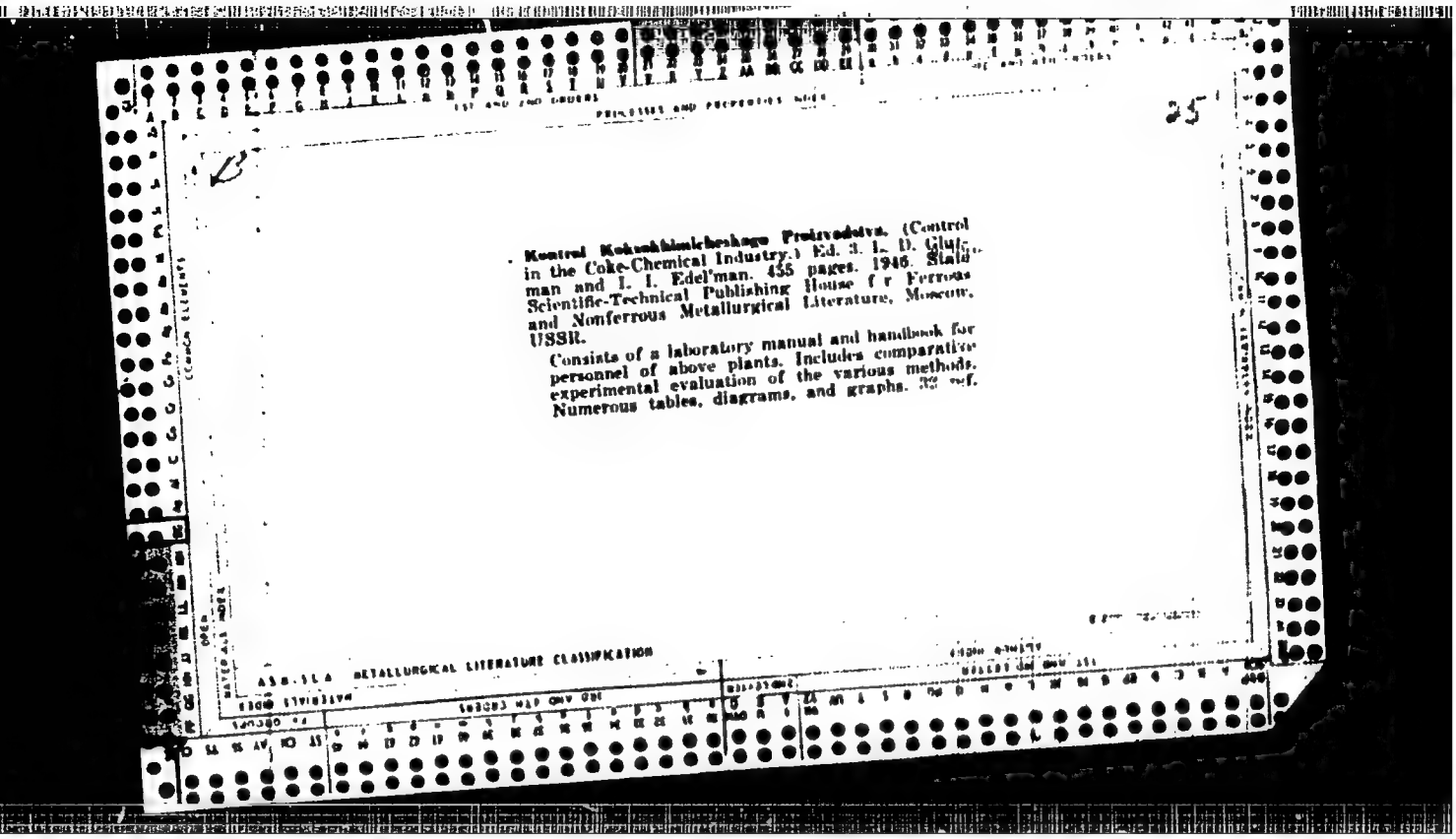


The extraction of pyridine bases from various products of the carbonization industry. L. D. Glazman and S. M. Grigor'ev. *Coke and Chem.* (U. S. S. R.) 11; No. 2, 29-35 (1941); *Chem. Zentr.* 1943, I, 1128-9.—A description is given of processes and equipment used for isolating pyridine bases (I) from coal tar, crude benzene, coke-oven gas, ammonia liquor, $(NH_4)_2SO_4$, and the basic liquors of saturators. After $(NH_4)_2SO_4$ removal by centrifuging, the saturator liquor is neutralized by vapor from the NH_3 still and then steam-distd. at 100-105°. A yield of 75-80% of I with respect to the content in the liquor is obtained in the first 1-6% of condensate. The distillate contg. I can be run into H_2SO_4, from which I is salted out by using solid $(NH_4)_2SO_4$. The upper layer contains 75% of I. The process can be made continuous, in which method NH_3 and steam are blown through the saturator liquor at 60-80°.

Glenn C. Roth

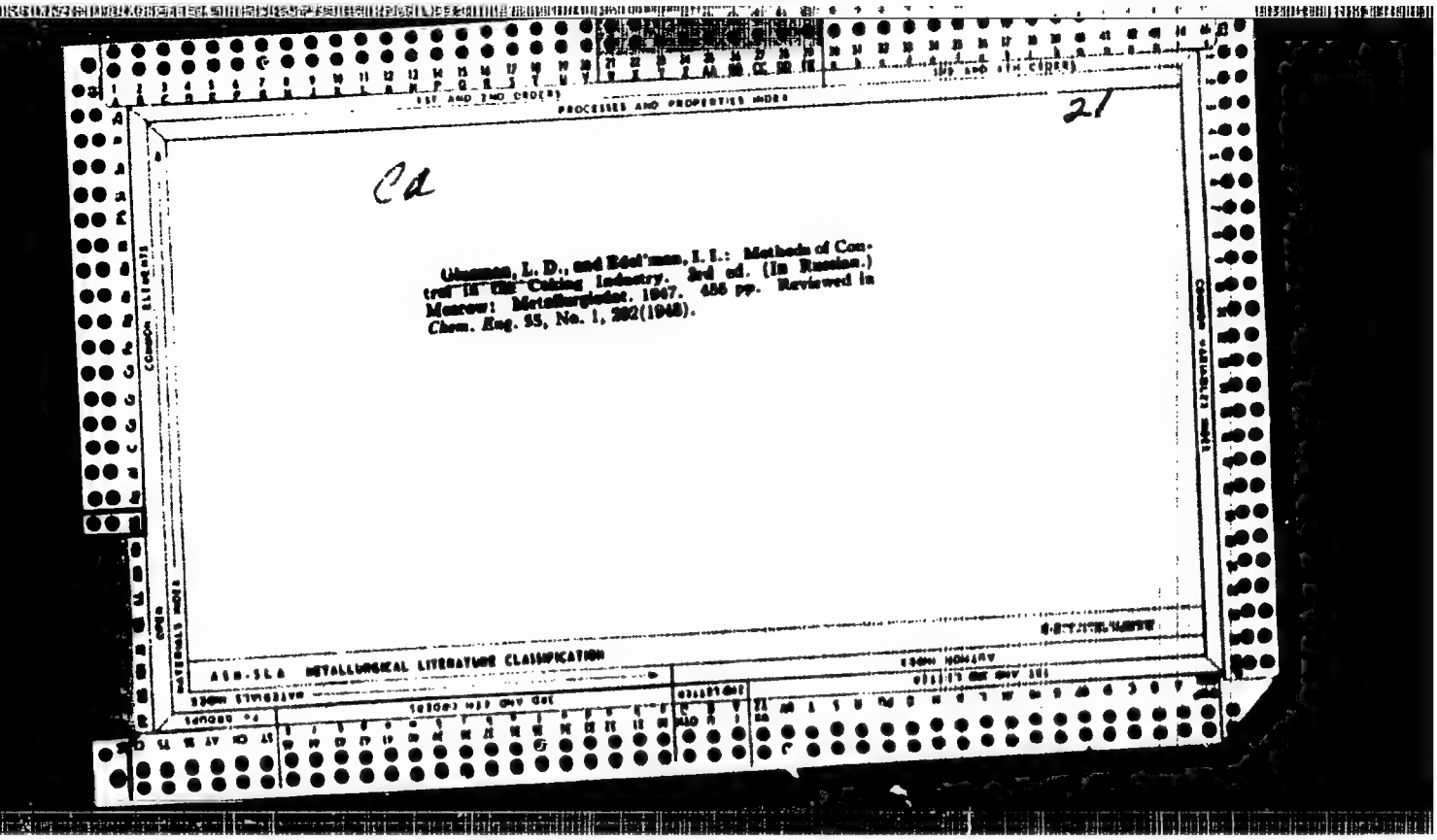


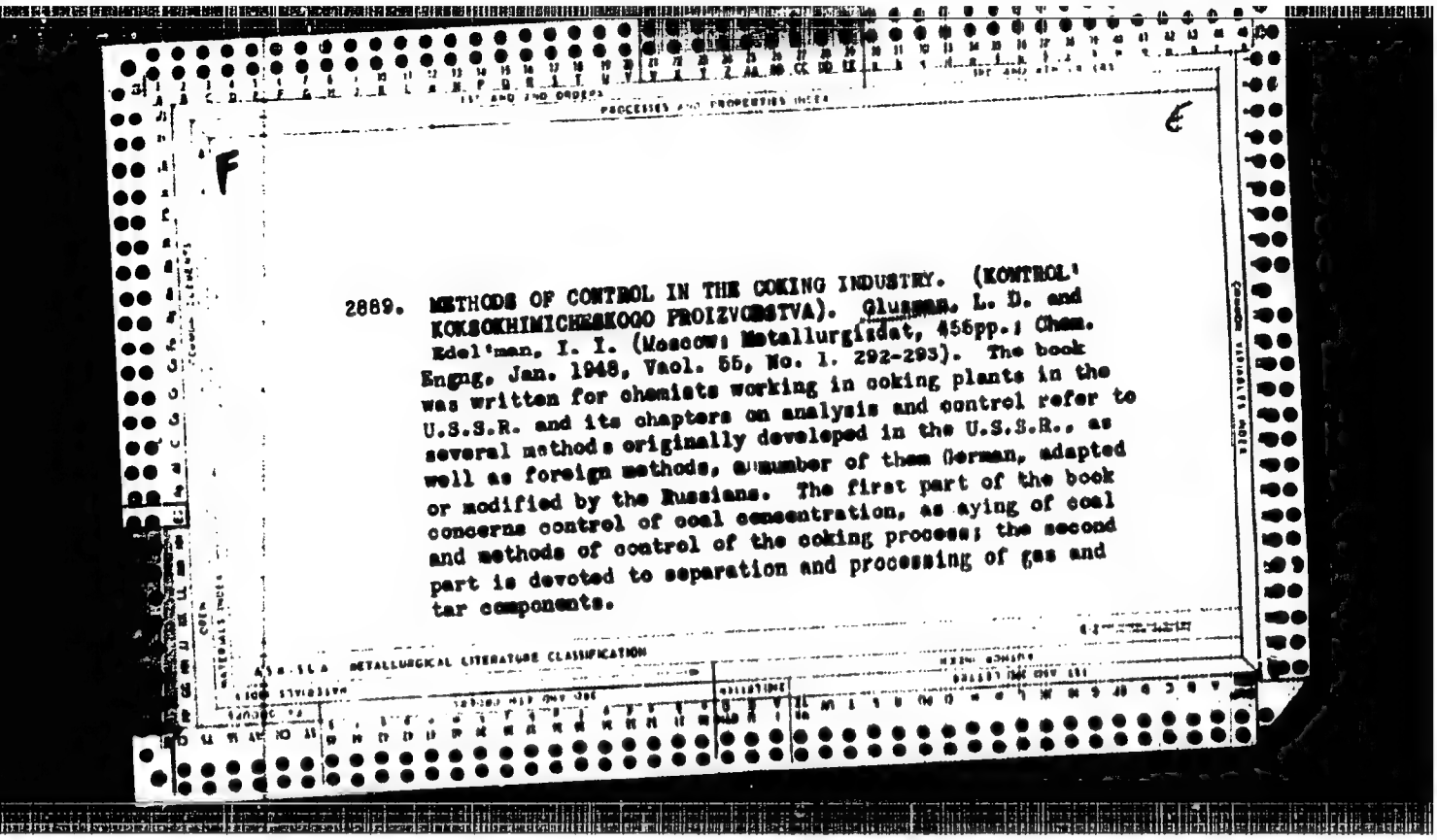
The extraction of pyridine bases from concentrated NH_4 water in an apparatus for continuous operation. L. D. Glueman and E. M. Grigor'ev. *Coke and Chem. (U. S. S. R.)* 11, No. 9, 24-31(1941); *Chem. Zentr.* 1942, I, 1129; cf. preceding abstr.—Extn. of pyridine bases (I) from dil. NH_4 liquor is not economical, but in the concd. liquor, where I is present from 8 to 9 g./l., these bases can be recovered. In the batch process, raw benzene is mixed with the NH_4 liquor in the ratio 1:1 or 2:1, agitated 30 min. and allowed to stand for 30 min. The I in the benzene fraction is extd. by 40–50% H_2SO_4 and the benzene removed. The acid can be reused until I becomes 15–20% and free H_2SO_4 is 3%. The phenol content of the benzene fraction can be extd. by 10–15% NaOH. A description is given of the app. for continuous treatment of the NH_4 liquor by benzene, and including a vibrating screen for fine dispersion of benzene drops. I and phenols can be removed from the benzene in a continuous process. Glenn C. Sisk



Kontrol Koksokhimicheskogo Proizvodstva. (Control in the Coke-Chemical Industry.) Ed. 3. L. D. Glu[illegible] man and I. I. Edel'man. 455 pages. 1946. Stalu Scientific-Technical Publishing House for Ferrous and Nonferrous Metallurgical Literature, Moscow, USSR.

Consists of a laboratory manual and handbook for personnel of above plants. Includes comparative experimental evaluation of the various methods. Numerous tables, diagrams, and graphs. [illegible] ref.





2889. METHODS OF CONTROL IN THE COKING INDUSTRY. (KONTROL' KOKSOKHIMICHESKOGO PROIZVODSTVA). Glusman, L. D. and Edel'man, I. I. (Moscow: Metallurgizdat, 456pp.; Chem. Engng. Jan. 1948, Vaol. 55, No. 1. 292-293). The book was written for chemists working in coking plants in the U.S.S.R. and its chapters on analysis and control refer to several methods originally developed in the U.S.S.R., as well as foreign methods, a number of them German, adapted or modified by the Russians. The first part of the book concerns control of coal concentration, as aying of coal and methods of control of the coking process; the second part is devoted to separation and processing of gas and tar components.

GLUZMAN, L. D

6

2158. Rapid determination of nitrogen in unrefined anthracene and its refining products. L. D. Gluzman, K. I. Mekhoned and D. S. Khinkis (Inst. for the Chemistry of Coal). *Zavod. Lab.*, 1955, 21 (12), 1433-1436.—The anthracene material (0·1 g) in a 50 ml Kjeldahl flask is heated to complete dissolution with 10 ml of conc. H_2SO_4 (about 3 to 5 min.) and then small portions of finely divided $K_2Cr_2O_7$ (2·4 g in all) are added with stirring during the continued heating of the flask (about 5 to 7 min.). The heating is continued further (5 to 7 min.) until a bright-green paste is obtained. The temperature throughout should be 250° to 260° C. After being cooled, the contents are transferred to a distillation flask and the NH_3 is determined by the usual method. The time taken is 15 to 20 min. for decomposition and 30 min. for distillation.

G. S. SMITH

LITVINENKO, M.S.; NOSALEVICH, I.M.; GLUZMAN, L.D.; GIMMEL'SHTEYN, T.Ye.; KOLTUN, R.M.

Tasks of the byproduct coking industry in augmenting the number of coke-oven by-products. Koks i khim. no.3:41-45 '56. (MLRA 9:8)

1. Ukrainskiy uglekhimicheskiy institut (for Litvinenko, Nosalevich, Gluzman); 2. Giprokoks (for Gimmel'shteyn); 3. Khar'kovskiy koksokhimicheskiy zavod.
(Coke industry)

GLUZMAN, L.D.; TSIN, R.M.

Determination of chlorides and rhodanides in coal tar and its fractions. Zav.lab. 22 no.1:45-46 '56. (MLRA 9:5)

1. Ukrainskiy nauchno-issledovatel'skiy uglekhimicheskiy institut. (Chlorides--Analysis) (Thiocyanates--Analysis) (Coal tar)

GRUZMAN, Lyubov' Davydovna; EDEL'MAN, Ita Iosifovna; FOSS, S.I., otvetstvennyy redaktor; SIBYAVSKAYA, Ye.K., redaktor izdatel'stva; LIBLIN, S.S., redaktor izdatel'stva; ANDREYEV, S.P., tekhnicheskiy redaktor

[Laboratory control of the by-product coke industry] Laboratornyi kontrol' koksokhimicheskogo proizvodstva. Izd. 4-oe, perer. i dop. Khar'kov, Gos.nauchno-tekhn.izd-vo lit-ry po chernoi i tsvetnoi metallurgii, 1957. 635 p. (MIRA 10:10)
(Coke industry)

GLUZMAN, L.D.

66-1-14/21

AUTHOR: Gluzman, L.D.

TITLE: Flash Evaporation of Coal Tar. (Odnokratnoye isparenlye kamennougolnoy smoly)

PERIODICAL: Koks i Khimiya, 1957, No.1, pp. 45 - 49 (USSR)

ABSTRACT: Flash evaporation curves (relationship between the temperature of evaporation and the proportion of distillate obtained) for coal tars produced on the Zaporozhskiy and Gorlovskiy Coke Oven Works were determined. The apparatus used was similar to that described in Ref.2. Characteristics of coal tars investigated are given in Table 1 and their flash evaporation curves in Fig.1. The yield of phenols, bases and naphthalene are given in Table 2 and Fig.2. The distribution of fractions of coal tar between the distillate and pitch during flash evaporation at various temperatures (300 - 406 °C) is given in Table 3. Analyses of pitch produced during flash evaporation of coal tar from the Zaporozhskiy Works (for 1954) is given in Table 4. The dependence of softening temperature of pitch on the percentage of distillate and the temperature of flash evaporation is shown in Fig.3, and their content of toluene insoluble and free carbon in Fig.4. The dependence between the softening temperature of pitch (y) and the temperature of flash evaporation (x) can be expressed by an equation

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y = 0.835x-250. x and y in °C). The equation holds within flash evaporating temperatures 300 - 420 °C. The dependence of the percent content of toluene insoluble substances in pitch (y) on the flash evaporation temperature (x) can be expressed by an equation y = 0.715x - 46.5. The results of the investigation indicated that within the temperature range 300 - 400 °C, the flash evaporation curves for tars from both works practically coincide and are represented by a straight line. An increase in flash evaporation temperature up to 440 °C (and generally above 410 °C) leads to losses of phenols and does not increase the yield of naphthalene. A complete recovery of technically useful phenols and naphthalene in the distillate takes place at a flash distillation temperature of 380 - 400 °C. With increasing flash evaporation temperature above 380 °C, the content of high boiling components in the distillate increases which leads to a deterioration in the quality of anthracene oil. The data obtained confirm the expediency of collection of two anthracene fractions for the production of a good-quality product for preserving railway sleepers and a raw anthracene. There are 4 tables, 5 graphs and 3 Slavic references.

ASSOCIATION: UKhIN
AVAILABLE: Library of Congress
Card 2/2

AUTHOR: Gluzman, L. D. 68-58-4-10/21

TITLE: The Production of High Concentration Anthracene and Carbozole from Raw Anthracene by Recrystallisation from Solvents (Polucheniye vysokoprotsentnykh antratsena i karbazola iz syrogo antratsena perekristallizatsiyey iz rastvoriteley)

PERIODICAL: Koks i Khimiya, 1958, Nr 4, pp 35-42 (USSR)

ABSTRACT: On the basis of literature data and previous work on the subject carried out by UKhIN the author proposed a scheme for the beneficiation of raw anthracene with a mixture of pyridine bases and toluene (a diagram is given). The scheme was designed on the basis of the following considerations: a) Raw material - redistilled raw anthracene containing 25-30% of anthracene, 10-15% of carbozole; 95% of the product boils out to 350°C (the temperature corrected). b) Solvent: a mixture of light pyridine bases (mainly pyridine) with toluene in a ratio of 1:1 by weight. Bases should boil out to 200°C. The amount of solvent is calculated as 7.5 - 8 parts per part of carbozole in the raw anthracene. c) The apparatus and the course of

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68-58-4-10/21

The Production of High Concentration Anthracene and Carbozole from Raw Anthracene by Recrystallisation from Solvents

beneficiation are shown in the diagram.
There are 5 tables, 1 figure and 4 references, all of which are Soviet.

ASSOCIATION: UKhIN – Ukrainskiy koksokhimicheskiy institut

1. Anthracenes--Production 2. Carbazoles--Production
3. Anthracenes--Crystallization 4. Carbazoles--Crystallization
5. Organic solvents--Performance

Card 2/2

AUTHOR: Gluzman, L.D. SOV/68-58-2-11/20

TITLE: The Production of Phenanthrene of Various Degrees of Purity (Polucheniye fenantrena razlichnoy stepeni chistoty)

PERIODICAL: Koks i Khimiya, 1959, Nr 2, pp 39 - 43 (USSR)

ABSTRACT: The possibility of production of technically pure phenanthrene (70-85%) from raw anthracene, anthracene oil, mother liquor from beneficiation of raw anthracene by solvents, etc. was demonstrated. A method of producing phenanthrene of any desired degree of purity from technical phenanthrene was developed. The method consists of fusing of the technical product with 20% of solid potassium hydroxide. The fusion takes place in two stages: at 240 - 260 °C carbozol reacts with alkali, then the temperature should be increased to 300 - 335 °C and retained for 3 hours. On this treatment practically all the components of technical phenanthrene are transferred into the alkali layer. After the separation of hydrocarbon and alkali layer, the former is re-distilled in order to separate completely alkali and coking residue. The results of alkali treatment are shown in Table 4. In order to remove anthracene, the re-distilled product is fused for 3-4 hours at 130 - 140 °C with maleic

Card1/2

anhydride added in a proportion of 110% of the theoretical (calculated on anthracene). Then the product is treated with 15% solution of sodium hydroxide at 100 - 105 °C in order to separate the excess of maleic anhydride. The hydrocarbon separated from alkali solution is redistilled and recrystallised twice from alcohol. The product so obtained is free from anthracene, carbozol and diphenylenesulphide and contains above 99% of pure phenanthrene melting at a temperature of about 100 °C. There are 4 tables and 6 references, 3 of which are English, 1 Soviet, 1 German and 1 French.

ASSOCIATION: UKhIN

S/068/60/000/010/001/001
E071/E435

AUTHORS: Gluzman, L.D., Gilyazetdinov, L.P. and Molchanov, B.A.

TITLE: On the Utilization of High Boiling Coal Tar Fractions for the Production of Carbon-Black

PERIODICAL: Koks i khimiya, 1960, No.10, pp.51-54

TEXT: The problem of production of an active carbon black from raw materials derived from the coking by-products and the development of technological and GOST standards for coal tar raw materials for the production of carbon black were investigated. Typical samples of coal-tar oils (creosote absorption oil; a mixture of absorption and anthracene oil; anthracene fraction I; anthracene fraction II; pitch distillate) from the Kadiyevsk and Zaporozhsk Coking Works were taken for the investigation. Physico-chemical characteristics of these oils and, for comparison, of some petroleum oils are given in Table 1. Group-structural analysis of the petroleum and coal tar oils was calculated by the methods given in earlier works (Ref.3 and 4). The product of the total number of benzene rings in the molecule and the content of carbon in the aromatic structures, named "aromatization factor"

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S/068/60/000/010/001/001
E071/E435

On the Utilization of High Boiling Coal Tar Fractions for the Production of Carbon-Black

(A=KoCa) was conditionally taken as the main physico-chemical characteristic of the raw materials. This index at Ca $\leqslant$ 85% characterizes the influence of the chemical composition of the raw material on the yield and properties of carbon black. Testing of coal-tar oils for the production of anthracene carbon black was carried out on an experimental plant with a throughput of 10 kg/hr under the following conditions: consumption of coke-oven gas for the carburization of oils - 10 m^3/kg; the temperature of carburized mixture - 360 to 380°C; the distance between burners and precipitating surface - 46 mm; overflow of tar from the carburettor - 6 to 9% on the starting raw material. The experimental samples of carbon-black did not differ substantially in their physico-chemical and physico-mechanical properties and corresponded to the requirements of GOST 7885-56. The yields of carbon-black from the individual oils are given in Table 2. Testing of the oils for the production of active furnace carbon-black was carried out on a pilot plant NIIShP, described in Ref.5.

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S/068/60/000/010/001/001
E071/E435

On the Utilization of High Boiling Coal Tar Fractions for the Production of Carbon-Black

Technological conditions were kept the same for all types of raw materials; throughput was 20 kg/hr with an air consumption of 6.5 m^3/kg, the temperature of the process varied from 1200 to 1300°C depending on the type of raw material. The experimental results are given in Table 3. It was found that coal tar oils in 79 to 92% consist of di- and tri-cyclic aromatic hydrocarbons. The most aromatized is pitch distillate. The yield of active anthracene carbon-black increases with increasing number of rings in the molecule and the content of aromatic carbon in the raw material. Anthracene fraction and pitch distillate present a high-quality raw material for the production of active anthracene carbon-black. The yield, specific surface and oil number of active furnace carbon black increase with increasing number of rings in the molecule and the content of carbon in aromatic structures of the raw material. In order to obtain moderately structurized carbon-black (more suitable for rubber than highly structurized black) absorption creosote oil, anthracene oil, anthracene fraction and mixtures of pitch distillate and

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S/068/60/000/010/001/001
E071/E435

On the Utilization of High Boiling Coal Tar Fractions for the Production of Carbon-Black

anthracene fraction II with petroleum oils can be used. There are 3 tables and 5 references: 3 Soviet, 1 English and 1 German.

ASSOCIATIONS: UKhIN, Gluzman, L.D; Nauchno-issledovatel'skiy institut shinnoy promyshlennosti (Scientific Research Institute of the Tyre Industry) Gilyazetdinov, L.P.; Kadiyevskiy sazhevyy zavod (Kadiyevka Carbon Black Works) Molchanov, B.A.

Card 4/4

S/068/61/000/001/001/001
E071/E235

AUTHORS: Gluzman, L. D., Nikitenko, A. G. and Tsin, R. M.

TITLE: Production of Technical Pyrene

PERIODICAL: Koks i khimiya, 1961, No. 1, pp. 52-55

TEXT: Pyrene is one of the important raw materials for the production of dyes and for this reason, the authors carried out an investigation of the potential resources, methods of separation and treatment of narrow pyrene fraction suitable for the preparation of products of various qualities from coal tar. In the USSR the coal tar is treated mainly on continuous plants for the production of a standard medium temperature pitch. The production of a high temperature pitch is done not by steam distillation, but by oxidation with air. Therefore, the raw materials for the production of pyrene are not "steam" but "air" pitch distillates. The pitch distillates (from the Zaporozh'ye Coking Works) taken for the investigation had the following properties: s.g. 1.120 at 20°C, pyrene content 4.85%; beginning of boiling 140°, 10% at 280°, 19% at 300°, 30% at 336°; 40% at 355°, 52% at 382°, 60% at 393°, 72% at 410°, 80% at 421°C. The distillates were fractionated on a

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E071/E235

Production of Technical Pyrene

laboratory column equivalent to 13-15 theoretical plates. On distillation, two narrow pyrene fractions were collected: 1) 384-388°C amounting to 6.5% of the initial pitch distillate, containing 33.0% of pyrene and 2) 388-395°C amounting to 8% and containing 48.2% of pyrene. The raw pyrene fractions were submitted to recrystallisation from various solvents. Optimum results were obtained from 30% aqueous pyridine and 30% alcoholic solution of solvent naphtha. The crystallisation conditions and results obtained are tabulated. It was found that recrystallisation of raw pyrene fractions containing less than 40% of pyrene give a mixture of pyrene with fluoranthen, which cannot be further enriched by this method and repeated recrystallisations lead only to losses of pure products, e.g., after four recrystallisations of fraction containing 27% of pyrene a product containing about 45% of pyrene was obtained with pyrene recovery of 58.4%. Subsequent recrystallisations were ineffective. Fractions containing 40% and more of pyrene can be easily enriched to 75-80%. The more concentrated is the initial pyrene fraction, the more concentrated

Card 2/ 4

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E071/E235

Production of Technical Pyrene

for the production of carbon black. The technological scheme for the production of technical pyrene is diagramatically shown in the text. There are 3 tables, 1 figure and 7 references: 3 Soviet and 4 non-Soviet.

ASSOCIATION: UKhIN

Card 4/4

27069
S/080/61/034/003/010/017
A057/A129

5.3300

AUTHORS: Gluzman, L. D., Nikitenko, A. G.

TITLE: Concerning the question of fluoranthen separation

PERIODICAL: Zhurnal prikladnoy khimii, v. 34, no. 3, 1961, 626 - 628

TEXT: A method for the separation of fluoranthen from coal-tar pitch distillates or an anthracene oil fraction is described. According to data obtained in the institute of the present authors coal-tar contains about 3.5% of fluoranthen and the companion compound pyrene in an amount of up to 1%. Several methods for separation of fluoranthen and separation of the latter from pyrene are described, e.g., in publications by O. Kruber et al. [Ref. 1: Erdöl und Kohle, 9, 637 (1955)], P. P. Karpukhin and N. M. Slominskiy [Ref. 7: Koks i khimiya, 10, 41 (1938)], and J. Szuba [Ref. 8: Przem. Chem., 12, 6, 316 (1956)]. The method described by O. Kruber was successfully proved by the present authors. Only the use of fluoranthen for production of intermediates and dyestuffs is mentioned in literature. The present authors assume that fluoranthen could be used simultaneously with other aromatic hydrocarbons as raw material in the production of synthetic resins of the type based on anthracene, naphthaline etc., such as described by

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27069
S/080/61/034/003/010/017
A057/A129

Concerning the question of fluoranthen separation

Wegler. It is also stated that almost the whole processing of coal-tars in the USSR occurs by a continuous method producing a pitch with a softening point of about 70°C which is converted by "air oxidation" and not "steam treatment" to a high-melting (150°C) product. Therefore the method described by the Polish authors [Ref. 8: Przem. Chem., 12, 11, 610 - 616 (1956)] is not suitable for the USSR, and in the present experiments only "air-oxidized" coal-tar pitch distillates and anthracene oil fractions were investigated (Table 1). The experiments were carried out under the assistance of T. A. Davydova. The pitch distillates were rectified on a 2 m column (diameter 40 mm) with an efficiency of 13 - 15 theoretical plates, at atmospheric pressure, and the fraction boiling at 370 - 385°C was withdrawn with a 5.7% yield containing 68% fluoranthen. From anthracene oil II the yield of the fluoranthen fraction was 14.5% with a fluoranthen content of 75% and a pyrene content of 21%. These fractions were recrystallized from ethanol, methanol, white spirit, pyridine, 30% pyridine, solvent, a mixture of 30% solvent and 70% ethanol, toluene, xylene or gasoline. Best results were obtained with the 30% aqueous solution of pyridine, gasoline and the mixture 30% solvent + 70% ethanol.(Table 2). If the ratio fluoranthen : pyrene is 3.5 : 1, a third recrystallization is necessary giving only a 15 - 25% fluoranthen yield. Anthracene oil II is a better raw

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material than the coal-tar pitch distillates. After a threefold recrystallization a 99 - 100% fluoranthen (melting point 109.2°C) with a 4% yield in relation to the anthracene oil II was obtained. A technological scheme for the production of fluoranthen according to the present results is tested presently. There are 2 tables and 9 references: 3 Soviet-bloc and 6 non-Soviet-bloc. The references to the English-language publications read as follows: M. C. Kloetzel, Holly E. Mertel, J. Am. Chem. Soc., 72, 4786 (1950); Th. Holbro, J. Appl. Chem., 3, 1 - 9 (1953).

ASSOCIATION: Ukrainskiy nauchno-issledovatel'skiy uglekhimicheskiy institut (Ukrainian Scientific Research Institute of Coal Chemistry)

SUBMITTED: April 12, 1960

Card 3/5

S/081/62/000/014/023/039
B166/B144

AUTHORS: Molchanov, B. A., Gluzman, L. D., Gilyazetdinov, L. P., Chaykun, M. I.

TITLE: Pitch distillate, a new form of raw material for the production of carbon black

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 14, 1962, 532, abstract 14M204 (Vestn. tekhn. i ekon. inform. N.-i in-t tekhn.-ekon. issled. Gos. kom-ta Sov. Min. SSSR po khimii, no. 12, 1961, 23 - 24)

TEXT: Industrial test results for a trial batch of pitch distillate (PD) are given, this being got by oxidizing and coking coal-tar pitch to form a highly aromatized product used in the manufacture of carbon black. The industrial process for producing the carbon black is practically the same as when producing spray burner black from anthracene fraction. It is established that both these forms of carbon black have the same physico-chemical properties but the yield of the carbon black from PD is 2.3% higher. The experimental carbon black fulfils the requirements of

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B166/B144

Pitch distillate, a new form...

ГОСТ 7885-56 (GOST 7885-56). PD dissolves well at a temperature ≥ 50°C in green oil and catalytic gas oil; the mixtures obtained are transportable To avoid the burners coking up in continued operation it is expedient to use PD mixed with the anthracene fraction (mixtures with a small PD content have been tested). When 5 - 10% PD is added to green oil the yield of spray burner black is increased by 3%. PD is being introduced into the production of spray burner and lamp black to replace the anthracene fraction which is in short supply. Available stocks of PD also permit of its use for partly replacing green oil. [Abstracter's note: Complete translation.]

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GLUZMAN, L.D.; TSIN, R.M.; RCK, A.A.

Production of 2-vinylpyridine. Koks i khim. no.11:48-51 '61.
(MIRA 15:1)

1. Ukrainskiy uglekhimicheskiy institut.
(Pyridine)

S/081/63/000/004/028/051
B149/B186

AUTHORS: Gluzman, L. D., Leyba, V. S., Davidyan, D. H., Yefimenko, V. M.

TITLE: The preparation of diphenic acid from phenanthrene

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 4, 1963, 461, abstract 4N78, (Sb. nauchn. tr. Ukr. n.-i. uglekhim. in-t.", no. 13 (35), 1962, 144 - 156)

TEXT: In order to develop an industrial method for the preparation of diphenic acid (I), a detailed study was made of liquid-phase oxidation of both pure and commercial grade phenanthrene (II) with H_2O_2 and CH_3COOH (III). The reaction was performed under various conditions with successive alteration of the parameters affecting the course of the oxidation: ratio of II, H_2O_2 and III, concentrations of H_2O_2 and III, temperature, duration of H_2O_2 addition and duration of oxidation, and intensity of stirring during the addition of H_2O_2 and during auto-oxidation. The effect of various catalysts (such as $(NH_4)_2MoO_4$, $MgSO_4$, $MnSO_4$, $CuSO_4$, $KHSO_4$, CH_3COONa, $(CH_3COO)_2CO$, V_2O_5, chrome-nickel alum and others), of different sorts of steel proposed

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The preparation of diphenic acid...

for the construction of the pilot plant [1X18H9T (1Kh18N9T) and 1X18H12M9T (1Kh18N12M9T)], of the quality of the initial II and its admixtures were investigated. The optimum conditions were found to be: ratio (in parts by weight) II:III:H_2O_2 (30%) = 1:5:3.2, temperature 90-92°, duration of oxidation ~2hrs. The period of addition of H_2O_2 has no effect on the yield of I. Stirring during the addition of H_2O_2 and during the reactions must be slow. The reaction can be achieved without catalysts (the ones listed above have no positive effect) with a 75-80% yield of I. The presence of anthracene (10-20%) and carbazole (2-5%) admixtures in II has no appreciable effect on the yield and quality of I. Optimum conditions for the isolation of I were found. The most complete isolation and highest degree of purity was achieved by: distillation of III under vacuum at 75% to 1/3 of the volume and cooling of the residue to 15°. The crystals which separate are washed on the filter with 10% solution of III. The yield of I (with m.p. ~228°) is 65-68%. The solubility of I in III, H_2O, CH_3COCH_3, dioxane, CH_3OH, C_2H_5OH, C_6H_6 and xylene was determined over the range 20-90° (the results are given in the form of graphs. For organic solvents, I is least soluble in C_6H_6 at

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The preparation of diphenic acid...

25^{0} (10.16 g); the solubility is twice this in xylene. A method of regeneration of III has been developed. [Abstracter's note: Complete translation.]

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ACCESSION NR: AP4009235 S/0068/64/000/001/0038/0041

AUTHOR: Gluzman, L. D.; Ruzhina, I. Ye.

TITLE: Producing phenanthrene, fluoranthene, and pyrene under commercial conditions

SOURCE: Koks i khimiya, no. 1, 1964, 38-41

TOPIC TAGS: phenanthrene, fluoranthene, pyrene, commercial production, recovery, fractionation, anthracene oil, pitch distillate

ABSTRACT: Plant-scale work at the Dnepropetrovsk Coke-Chemical Plant on recovery of phenanthrene, fluoranthene and pyrene by fractionating anthracene oil and pitch distillates confirmed earlier data from UKhIN that anthracene oil is the optimum crude for phenanthrene and fluoranthene, and pyrene is best recovered from pitch oil. Data are presented showing the conditions for separating the individual fractions, the amounts and the yields of the desired products. Orig. art. has: 4 tables.

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ACCESSION NR: AP4009235

ASSOCIATION: Dnepropetrovskiy khimicheskiy zavod (Dnepropetrovsk Coke-Chemical Plant)

SUBMITTED:	00	DATE ACQ:	16Feb64	ENCL:	00
SUB CODE:	MA	NO REF SOV:	004	OTHER:	000

Card 2/2

RUZHINA, I.Ye.; RASHKEVICH, I.Ya.; ITKINA, R.A.; GLUZMAN, L.D.;
Prinimali uchastiye: DEMCHENKO, L.G.; GOL'PERINA, R.L.

Curves of the single-stage evaporation and of the true temperatures in the boiling of raw materials for pyrene production. Koks i khim. no.3:48-52 '64. (MIRA 17:4)

1. Dnepropetrovskiy koksokhimicheskiy zavod (for Ruzhina, Rashkevich, Itkina). 2. Ukrainskiy uglekhimicheskiy institut (for Gluzman).

L 1962-66 EWT(m)/EPF(c)/EWP(j) RM

ACCESSION NR: AP5021785 UR/0068/65/000/008/0046/0049
668.74

AUTHOR: Stolyarenko, L. P.; Gluzman, L. D.

TITLE: Chemistry and technology of acenaphthylene production

SOURCE: Koks i khimiya, no. 8, 1965, 46-49

TOPIC TAGS: acenaphthylene, acenaphthene, dehydrogenation

ABSTRACT: To prepare acenaphthylene of high purity, the authors combined the method of catalytic dehydrogenation of acenaphthene with vacuum techniques. The effect of catalyst quality, reaction temperature, degree of vacuum, raw material quality, and presence of inert additives was investigated both under laboratory conditions and on larger batch-operated units. The industrial catalyst K-5 was found to be the best. The pressure has a marked influence on the dehydrogenation; the process is most complete when the residual pressure is 3-10 mm Hg. Addition of nitrogen as an inert carrier in the molar ratio of 8.4:1 raises the yield of acenaphthylene without improving its quality. Using the K-5 catalyst at a pressure of 8-15 mm Hg, the authors carried out the process in two variants: (a) concentration of acenaphthene -

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L 1962-66 EWT(m)/EPF(c)/EWP(j) RM

ACCESSION NR: AP5021785 UR/0068/65/000/008/0046/0049

668.71

AUTHOR: Stolyarenko, L. P.; Gluzman, L. D.

TITLE: Chemistry and technology of acenaphthylene production

SOURCE: Koks i khimiya, no. 8, 1965, 46-49

TOPIC TAGS: acenaphthylene, acenaphthene, dehydrogenation

ABSTRACT: To prepare acenaphthylene of high purity, the authors combined the method of catalytic dehydrogenation of acenaphthene with vacuum techniques. The effect of catalyst quality, reaction temperature, degree of vacuum, raw material quality, and presence of inert additives was investigated both under laboratory conditions and on larger batch-operated units. The industrial catalyst K-5 was found to be the best. The pressure has a marked influence on the dehydrogenation; the process is most complete when the residual pressure is 3-10 mm Hg. Addition of nitrogen as an inert carrier in the molar ratio of 8.4:1 raises the yield of acenaphthylene without improving its quality. Using the K-5 catalyst at a pressure of 8-15 mm Hg, the authors carried out the process in two variants: (a) concentration of acenaphthene -

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L 1962-66

ACCESSION NR: AP5021785

dehydrogenation and (b) dehydrogenation - concentration of acenaphthylene. The latter procedure proved to be preferable. Recrystallization from ethyl or methyl alcohol was used to obtain high-purity acenaphthylene from the less pure product. Orig. art. has: 5 tables.

ASSOCIATION: UkhIN

SUBMITTED: 00 ENCL: 00 SUB CODE: GC

NO REF SOV: 003 OTHER: 009

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